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IMPORTANT DECISION IN THE EDISON ELECTRIC LIGHT SUITS.

In May, 1885, the Edison Electric Light Co. brought a number of suits for infringement of its patents against various electric light companies and others using incandescent plants. These suits were about eighty in number, and thirty of them were contested by the United States Electric Light Co., of New York.

Last April the latter cases were argued before Judge Wallace of the United States Circuit Court, and he has just rendered a decision against the Edison company.

From a broader point of view than that of the magnitude of the interests directly involved, the decision is of importance. It is based on the interpretation of Section 4,887 of the United States patent laws. This is the well known clause limiting the duration of an American patent to the term of the shortest foreign patent which may have been granted before it was granted in this country. The ground of the defense was that a patent for the same invention had been taken out in the Austro-Hungarian empire for one year, and by proper process was extended to two years, and expired on July 21, 1888. This date was prior to the commencement of the suit. The American patent bore an intermediate date of granting, August 22, 1882.

The decision covered the following points. The suit was brought subsequent to July 21, 1888. The court held that it could have no jurisdiction if the American patent expired on that day along with the Austro-Hungarian patent because suit was brought nearly two years later. The defendants' plea as to lack of jurisdiction was therefore allowed. The complainants had claimed, as application for an American patent was made before the inventor applied abroad, that section 4,887 should not apply. This Judge Wallace disallowed.

The injustice done by this much debated clause of our patent law is very evident in the present instance. Mr. Edison appears as the uncontested inventor of an immensely valuable system. Possibly by neglect a comparatively unimportant foreign patent is allowed to lapse. At once his invention is declared public property and at the mercy of any one who save for a technicality would be an infringer. Many lawyers have contended for the abolition in toto of this statutory restriction. In Edison's case the hardship caused by its application is emphasized by the fact that he had applied for his American patent first. The statute, however, is based on granting, not on application. A delay in action by the examiner, clerical inattention, or some other trivial cause might bring about the same result for any one. If so radical a measure as the abolition of the foreign limitation clause seems obnoxious, some change should be made. The time when the American patent is applied for should at least be made the critical point; it should not be the day of granting the patent. The date of application is fixed by the inventor's own action. The date of granting may depend on many other causes.

Much might be done by appropriate legislation in placing the relations of American and foreign patents on a better basis. The Industrial Union has had little effect. It is not in international action that the remedy is to be found. As the law now stands, the United States gives far greater privileges to foreigners than she receives from other nations. In England, for instance, a patent costs nearly twenty times as much as an American one, yet we give a foreign inventor a patent at our nominal rate. The United States should charge the foreigner as much as his government charges our citizens. A different rate for citizens of other countries could be established.

The equitable view of patents regards them as a franchise granted for a valuable consideration. The consideration is the publishing of the invention, and the price paid for such publication is the seventeen years' monopoly. In every sense of the term, our citizens are entitled to this privilege. It operates to stimulate invention and manufacturing industries, and has placed America at the head in the race for material progress. But it is not at all so clear that a foreign inventor should be allowed any patent. If his invention is published abroad by patenting, then the disclosure is made. The patent right is an artificial and statutory one, and can be equitably withheld. As far as the encouragement of manufacturing industries in America is concerned, patents to foreigners do little or nothing for it. A point well worth consideration is whether United States patents to foreign inventors should not be abolished.

In the particular case under consideration, a great hardship appears to have been done. A purely technical defense to allegations of infringement has carried the day against an undisputed inventor. It is evident that there is room here for special legislation. It is but a few months ago that attention was called to the renewal and extension by Congress of an expired patent. The Edison patents seem entitled to the same favor. They are declared as expired on a technical point. Their expiration for all that appears may have been due to the delays of the Patent Office officials. Their merit and originality are not impugned. Reparation is due, and can easily be awarded.

At the same time, without any appeal to an interna-

tional tribunal or regulation, the obvious defects in that portion of our patent law relating to foreign patents and patentees might be brought into a better condition. International agreements inevitably lead to complications. America in the regulation of her industries and commerce should be as free as possible from foreign limitations. In these respects above all she should be independent. The action of the Patent Office and of our circuit courts, where patents are in issue, should not be based upon transactions with foreign officials and bureaus. In Congressional action only can a remedy be found.

THE UNDERGROUND PIPES OF LARGE CITIES.

The increasing requirements of modern civilization are well illustrated by the extent and variety of underground pipe systems now employed in large cities. Thus there are in actual operation:

- 1. Pipes for conveying and delivering illuminating gas.
2. Pipes for conveying and delivering fuel gas.
3. Pipes for conveying and delivering drinking water, and for fire purposes.
4. Pipes for conveying salt water for street sprinkling and for fire purposes.
5. Pipes for draining, and carrying off sewage and surface water.
6. Pipes for delivering hot water under high pressure, for heating purposes and power.
7. Pipes for delivering cold water under high pressure, for power.
8. Pipes for delivering live steam under pressure, for heating purposes and power.
9. Pipes for delivering compressed air, for purposes of power and ventilation.
10. Pipes for producing power where required, by vacuum or suction, and for ventilation.
11. Pipes for conveying letters and packages, by compressed air and by vacuum.
12. Pipes for regulating clocks, by compressed air.
13. Pipes for conveying mineral oils.
14. Pipes for electrical wires for electric lighting, electric railways, telephones, and telegraphy.
15. Pipes for power ropes for driving machinery, moving street railway cars, etc.

THE CARNEGIE SAVINGS BANK.

The firm of Carnegie, Phipps & Co., of Pittsburg, issued during the present month a circular to their employes, offering to take deposits from them not to exceed \$2,000 for each individual, and to allow six per cent interest on the money. This offer was coupled with a statement that the firm, as hitherto, would continue to lend money at bond and mortgage to intending builders of homes. At the end of the circular the men were exhorted to adopt the practice of saving and investing some part of their earnings as a provision against old age. This offer represents what may be justly termed an advanced form of profit sharing. The rate of interest and the conditions are such that there is little probability of the banking account giving any profit to the firm. Too much praise cannot be awarded to the members of the partnership for showing so great and so judiciously conceived an interest in the affairs of their workmen.

ELECTRIC LIGHT FIRES.

The frequency of conflagration caused by electric light wires induced the Electric Club of Philadelphia to inquire into the means of preventing them. At a recent meeting, the report of a committee of four months' standing, under the chairmanship of Mr. H. B. Cutter, was presented. The various automatic cut-outs proposed by different inventors were considered, some utilizing the heating of a wire, some the action of a spring pulling against an armature of a magnet. The old arrangement of a fusible alloy cut-off was pronounced objectionable on account of the interruption produced when it melted, but this was obviated by an arrangement for throwing other fusible pieces into the circuit one after the other. Thus a momentary increase of current would only cause a momentary stoppage. It was evident that there is a good field for inventors here, in devising an efficient safeguard against too strong currents that may accidentally be thrown upon a wire unable to carry them without heating.

PROGRESS OF THE PHONOGRAPH.

We give elsewhere an account of the trial of the new Edison phonograph at the rooms of the Electrical Club in this city. The results are substantially the same as those described by us in connection with our illustrations of the new instrument, given in the SCIENTIFIC AMERICAN of December 31, 1887. A modified form of the phonograph, invented by Prof. Alexander Graham Bell and associates, is said to give excellent results.

Still another form has been perfected by Mr. Emile Berliner, of Washington, D. C., who recently read a paper on the subject before the Franklin Institute, Philadelphia, and also exhibited his new instrument, which he styles the "gramophone." One of the distinguishing features of this invention is that the indentations of the transmitting diaphragm are made

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